

AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheet" of drawings includes changes to Figure 1. The attached "Replacement Sheet," which includes Figure 1, replaces the original sheet including Figure 1.

Attachment: Replacement Sheet

REMARKS

Claims 1-18 are now pending in the application. Claim 7 has been amended to correct a typographical error. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

DRAWINGS

The drawings stand objected to for certain informalities. Applicant has attached a revised drawing for the Examiner's approval. In the "Replacement Sheet", FIG. 1 is labeled as prior art.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 3, 6, 7, 9, 12, 13, 15, and 18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Jacobs (U.S. Pat. No. 6,618,788). This rejection is respectfully traversed.

Claim 7 explicitly requires "a command bus" and "at least one integrated circuit chip connected to the command bus." As recited, the command bus and integrated circuit chip connected to the command bus are each separate hardware entities, as would be appreciated by one of ordinary skill in the art. Applicant respectfully disagrees with the Examiner's assertion that Jacobs teaches the above features.

Specifically, in paragraph 4 of the Office Action, the Examiner asserts that the command bus and command interface defined in claim 7 read onto the register-based ATA host driver 134 and that the at least one integrated circuit chip defined in claim 7

reads onto the MSC driver 190, USB driver 192, and USB host controller 194. Applicant respectfully disagrees with the Examiner the following reasons.

In Jacobs, there is no hardware command bus and there is no hardware integrated circuit chip connected to the command bus. Jacobs at best shows that the host driver 134 and the MSC driver 190 are both software drivers.

In Jacobs, the commands are transferred from the ATA host driver 134 to the MSC driver 190 via software drivers. Further, Jacobs fails to disclose that the ATA commands are transferred onto a hardware command bus or that the MSC driver 190 is implemented in an integrated circuit chip which is connected to such a command bus. One of ordinary skill in the art would clearly appreciate the above points from the fact that the elements 134 and 190 are both referred to as “drivers.”

Further, Jacobs states that “Fig. 8 shows a more specific communication stack.” Jacobs, Col. 6, Line 26. One ordinary skill in the art would appreciate that those texts refer to a logical stack of software components.

Further, Jacobs states that “on the host side, a register-based ATA host driver 134 has *functionality comparable to* that of an ATA driver used with an onboard ATA bus.” Jacobs, Col. 5, Lines 57 to 59. One of ordinary skill in the art would appreciate, from such a statement that if the ATA host driver 134 has *functionality comparable to* an onboard ATA bus, then logically a hardware bus is not present in the communication stacks shown in Figs. 7 and 8 of Jacobs.

The benefits of the host apparatus recited by claim 7, for example, are discussed throughout the Specification. For example, one or more embodiments of claim 7 can be utilized for hosts, such as set top boxes, that only have ATA or SATA buses and do not

have the capability to include an external databus such as USB or 1394. The manufacturer of the host can in principle provide an interface to a USB or 1394 databus but this is technically burdensome to the manufacturer without placing a burden on the processor of the host. Exemplary problems are discussed in detail in paragraph [0005] (reference in this response is made to the Substitute Specification submitted on September 8, 2008). These problems are also explained in paragraphs [0006] to [0009] with reference to the specific example of Fig. 1, wherein the host is additionally provided with an interface for a 1394 bus, including a software stack 10 and driver 11 for the physical layer 12. As explained herein, the host software in this exemplary configuration is complex.

One or more embodiments of claim 7 can deal with this problem by providing an integrated circuit chip as defined in the claim, in particular having an interface arranged to convert commands from the command bus in accordance with the ATA/IDE or Serial ATA standard into the IEEE 1394 or USB standard. This may solve the problems previously mentioned for the reasons set out in paragraphs [0015] to [0018] of the Specification. For example, by taking advantage of the presence of the ATA bus in the host, it is possible to implement the conversion in an integrated circuit chip which is technically more straightforward to the manufacturer of the host and does not place a burden on the host processor.

The prior art example of Fig. 1 of Jacobs appears to include an internal ATA bus (bus 42) and an interface for an external bus (a USB interface 36) directly connected to the PCI bridge 26. In that development, in order to provide connection to an external databus, through ATA, in accordance with the IEEE 1394 or USB standard, Jacobs at

best shows a design in which the host does not have an ATA bus at all, but instead is provided with the software stack (drivers 136,190,192) and hardware (packet host interface 138, USB Host Controller 194) illustrated in Figs. 7 and 8 of Jacobs. In contrast, claim 7 provides an integrated circuit chip that connects to the ATA bus in the host.

In view of the foregoing, Applicant submits that claim 7 and its dependent claims 8-12 define over the art cited by the Examiner. Claims 1 and 13 each recite features similar to one or more of the above distinguishing features of claim 7. Therefore, claim 1 and its dependent claims 2-6 as well as claim 13 and its dependent claims 14-18 define over the art cited by the Examiner for one or more of the reasons set forth above regarding claim 7.

REJECTION UNDER 35 U.S.C. § 103

Claims 2, 4, 5, 8, 10, 11, 14, 16, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jacobs (U.S. Pat. No. 6,618,788) in view of Hatano (U.S. Pub. No. 2002/0002645). This rejection is respectfully traversed.

Applicant submits that the arguments presented above apply here equally. Applicant further submits that Hatano appears silent about the above distinguishing features of claim 7 and, thus, fails to cure the deficiencies of Jacobs.

In view of the foregoing, Applicant submits that claims 2, 4, 5, 8, 10, 11, 14, 16, and 17 define over the art cited by the Examiner.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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